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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/631,412	08/03/2000	Jeffrey Ronald King	IGB 1531	9598

25230 7590 07/19/2002

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EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

12

DATE MAILED: 07/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/631,412

Applicant(s)

KING ET AL.

Examiner

Callie E. Shosho

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1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 1-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-30 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7,11.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicants' submission of a new abstract in amendment filed 2/27/02 overcomes examiner's objections with respect to the abstract.

The following rejection is non-final, however, in light of the use of new reference against the present claims, namely, Ashida et al. (U.S. 6,357,871), which was published after the mailing date of the previous office action.

Election/Restrictions

2. Applicant's election with traverse of Group II in Paper No. 10 is acknowledged. The traversal is on the ground(s) that the examiner could search all the claims since the examiner has not shown that (i) the invention of Group I and the invention of Group II are independent or distinct and (ii) unrestricted examination would seriously burden the examiner. This is not found persuasive because of the following explanation.

It is noted that MPEP 803, and in particular, MPEP at page 800-3, which serves as a guide to implement 35 USC 121, clearly states that under the statute, an application may be properly restricted "to one of two or more claimed inventions only if they are able to support separate patents and they are independent or distinct". Therefore, inventions can be related but still distinct and be properly restrictable on the basis set forth in MPEP 806.05(a)-(i). The inventions of Group I and Group II are distinct given that they have a separate status in the art since the claims of Group I are drawn to recording medium, i.e. product, and the claims of Group II are drawn to ink jet recording method, i.e. process.

Further, it is the examiner's position that there would be undue burden to examine the claims of Group I and the claims of Group II given their different classification and/or that they have acquired a separate status in the art because of their divergent subject matter. Undue burden was established in the Restriction requirement set forth in the office action mailed 8/3/01, Paper No. 6. Undue burden is shown because Group I and Group II directed to recording medium and ink jet recording method, respectively, require a separate field of search as noted in paragraph 1 of the office action.

Additionally, when showing that the inventions of Group I and Group II are distinct, examiner stated that the process for using the product as claimed could be practiced with other materially different products. Applicants argue that these other products suggested by the examiner would not produce image which is "substantially within the upper protective layer" as does the product, i.e. recording medium, of the present invention. However, while applicants argue that the materially different products suggested by the examiner would not produce final product wherein the image is "substantially within the upper protective layer", applicants have not shown that the process as claimed cannot be practiced with these other materially different products set forth by the examiner. Further, it is noted that there is no requirement in the present claims that the image is "substantially within the upper protective layer".

The requirement is still deemed proper and is therefore made FINAL.

3. Claims 1-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 10.

Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 17, 19, 25-26, and 29-30 are rejected under 35 U.S.C. 102(a) as being anticipated by EP 858905.

The rejection is adequately set forth in paragraph 8 of the office action mailed 8/3/01, Paper No.6, and is incorporated here by reference.

6. Claims 17 and 19-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Ashida et al. (U.S. 6,357,871).

Ashida et al. disclose an ink jet printing method comprising (i) printing onto an ink jet recording sheet which comprises substrate, ink receiving layer, and upper protective layer which comprises particulate resin having film-forming temperature of 40-150 °C and average particle size of 1-20 µm such as polyethylene or ethylene/acrylic acid copolymer and binder such as polyvinyl alcohol and (ii) heating the printed image. It is further disclosed that the protective layer is coated onto the ink receiving layer and that aqueous inks are used to print the image on the recording medium. Ashida et al. also disclose that after printing onto the ink jet recording sheet, the printed image is heated by pressure or by passing through a laminator wherein an inert sheet such as polyester film is in contact with the recording sheet when passed through the laminator in order to impart high gloss to the printed image (col.4, lines 15-18 and 29-31, col.5,

lines 12-31 and 37-40, col.11, lines 55-61, col.21, lines 28-35, col.22, lines 13-17, col.23, lines 54-62).

In light of the above, it is clear that Ashida et al. anticipate the present claims.

Claim Rejections - 35 USC § 103

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 17, 19, 21-26, and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higuma et al. (U.S. 5,140,339) in view of Shaw-Klein et al. (U.S. 6,147,139).

The rejection is adequately set forth in paragraph 11 of the office action mailed 8/3/01, Paper No.6, and is incorporated here by reference.

9. Claims 17-18, 21-24, and 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibahara et al. (U.S. 6,001,463) in view of Shaw-Klein et al. (U.S. 6,147,139).

The rejection is adequately set forth in paragraph 12 of the office action mailed 8/3/01, Paper No.6, and is incorporated here by reference.

10. Claims 17, 19, 20-25, and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodager et al. (U.S. 5,984,467) in view of EP 858905.

The rejection is adequately set forth in paragraph 13 of the office action mailed 8/3/01, Paper No.6, and is incorporated here by reference.

Response to Arguments

11. Applicants arguments filed 2/27/02 have been fully considered but they are not persuasive.

Specifically, applicants argue that:

(a) None of the cited references disclose that the printed image is substantially retained within the upper protective layer as is the printed image of the present invention.

(b) No motivation to combine either Higuma et al. or Shibahara et al. with Shaw-Klein et al.

With respect to argument (a), applicants argue that in contrast to the materials of EP 858905, the image in the present invention is "substantially retained within the upper protective layer". Similarly, applicants argue that there is no disclosure in Higuma et al. or Shibahara et al., either alone or in combination with Shaw-Klein et al., that the printed image is "substantially retained within the upper protective layer".

However, it is noted that there is no requirement in the present claims that the image is "substantially retained within the upper protective layer" and thus, no requirement that the cited prior art teach such limitation. Further, *if* such limitation were present in the instant claims, given that EP 858905 and either Higuma et al. or Shibahara et al. in view of Shaw-Klein et al. disclose ink jet printing method as presently claimed wherein the method utilizes recording medium as

presently claimed, it is the examiner's position, absent evidence to the contrary, that the image would inherently or intrinsically be "substantially retained within the upper protective layer".

Additionally, it is noted that there is some confusion with the phrase be "substantially retained within the upper protective layer" because it is not clear what is meant by "substantially". How much of the image is retained in the upper protective layer? Is some of the image retained in the upper protective layer and some in the ink receiving layer? Clarification is requested.

With respect to argument (b), it is noted that both Higuma et al. and Shibahara et al. disclose ink jet printing method comprising printing onto a recording medium as presently claimed with the exception that neither reference discloses heating the printed image.

This is why each reference is used in combination with Shaw-Klein et al. which teach (col.9, lines 3-28) heating the printed image in order to impart high gloss and improve the rub resistance of the printed image. Shaw-Klein et al. also discloses the criticality of heating printed images by showing that both the gloss and rub resistance of the heated printed image is superior to printed image which is not subjected to heating (Table at col.9, line 17).


In light of the disclosure of Shaw-Klein et al. that heated printed images possess superior properties as opposed to printed images not subjected to heating, it is the examiner's position that there is motivation to combine Higuma et al. or Shibahara et al. with Shaw-Klein et al.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Callie E. Shosho
Examiner
Art Unit 1714

CS
July 10, 2002